

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

Present: The Honorable CHRISTINA A. SNYDER

CATHERINE JEANG

Not Present

N/A

Deputy Clerk

Court Reporter / Recorder

Tape No.

Attorneys Present for Plaintiffs:

Attorneys Present for Defendants:

N/A

N/A

**Proceedings:** CLAIM CONSTRUCTION ORDER

## I. INTRODUCTION

This claim construction order construes the disputed terms in U.S. Patent No. 9,964,266 (“the ‘266 Patent”). On August 15, 2018, plaintiff DMF, Inc. filed a complaint against defendants AMP Plus, Inc. d/b/a ELCO Lighting, and ELCO Lighting, Inc. (collectively “ELCO”), alleging claims for patent infringement of the ‘266 Patent, trademark infringement, and unfair competition. Dkt. 1 (“Compl.”).

On June 21, 2019, DMF filed a joint claim construction chart. Dkt. 227. On July 3, 2019, the parties filed claim construction briefs that they had previously exchanged with each other. Dkt. 237 (“Pl.’s Opening”); Dkt. 242 (“Def.’s Opening”); Dkt. 239 (“Pl.’s Response”); Dkt. 243 (“Def.’s Response”). The parties filed supplemental briefs on July 22, 2019. Dkt. 256 (“Pl. Supp.”); Dkt. 255 (“Def. Supp.”).

The Court held a hearing on July 29, 2019. For the reasons stated herein, the Court adopts the construction set forth below.

## II. OVERVIEW OF THE ‘266 PATENT

On May 8, 2018, the United States Patent and Trademark Office issued the ‘266 Patent, entitled “Unified Driver and Light Source Assembly for Recessed Lighting” to inventor Michael Danesh. Compl. Ex. 1 (“Patent”). The ‘266 Patent teaches a compact recessed lighting system including a light source module and a driver coupled to a unified casting. Id.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

The '266 Patent has 30 claims, four of which are independent (claims 1, 17, 22, and 26). Patent at 8–12. The two independent claims relevant to this action are claims 1 and 26. Compl. ¶¶ 121, 124.

Claim 1 discloses:

A compact recessed lighting system, comprising:

a light source module for emitting light;

a driver for powering the light source module to emit light, the driver including an electronic device to at least one of supply and regulate electrical energy to the light source module;

a unified casting with a heat conducting closed rear face, a heat conducting sidewall and an open front face wherein the heat conducting sidewall is joined to the heat conducting closed rear face at one end and defines the open front face of the unified casting at another end, wherein the heat conducting sidewall has a first dimension between the heat conducting closed rear face and the open front face of less than 2 inches and extends 360 degrees around a center axis of the unified casting to define a first cavity that extends forward from the heat conducting closed rear face to the open front face of the unified casting and outward to the heat conducting sidewall, wherein the light source module and the driver are positioned inside the first cavity while being coupled to the heat conducting closed rear face of the unified casting such that the light source module is closer to the closed rear face of the unified casting than the open front face of the unified casting, and wherein the unified casting includes a plurality of elements positioned proximate to the open front face so as to align with corresponding tabs of a standard junction box and thereby facilitate holding the unified casting up against the standard junction box when the unified casting is installed in the standard junction box; and

a reflector positioned inside the first cavity of the unified casting and coupled to and surrounding the light source module such that the reflector directs light produced by the light source module into an area surrounding the compact recessed lighting system while enclosing the driver from exposure to the area surrounding the compact recessed lighting system, wherein the

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

heat conducting closed rear face and the heat conducting sidewall of the unified casting significantly dissipate heat generated by the light source module during operation of the light source module.

Patent 8:2–44. Claim 26 discloses:

A lighting system, comprising:

a substantially heat conducting unified casting forming a casting cavity having a front face and a rear heat conducting portion and having dimensions to fit inside a standard-sized junction box, the substantially heat conducting unified casting including a plurality of elements positioned on the casting so as to align with corresponding tabs of the standard-sized junction box;

a light source module, disposed in the casting cavity, to emit light, wherein the light source module is positioned in the casting cavity closer to the rear heat conducting portion than the front face of the substantially heat conducting unified casting;

a driver, disposed in the casting cavity, to power the light source module; and

a reflector, disposed in the casting cavity to cover the driver and to direct light produced by the light source module out of the front face, wherein the substantially heat conducting unified casting significantly dissipates heat generated by the light source module during operation of the light source module.

Id. 12:9–31.

DMF alleges that conventional recessed lighting systems require: (1) the use of a heat sink stacked on top of the light source’s housing; (2) the installation of fireboxes to enclose the lighting system; and (3) separate junction boxes for connecting wires from the lighting fixture to the building’s electrical system. Compl. ¶¶ 12–14. According to DMF, Danesh recognized these issues and “designed [an] LED Module with a low-profile heat conducting casting that could both house LED components and significantly dissipate heat from the LED light source, rather than stacking a conventional heat-sink on top of a separate component housing,” and “was small enough to fit into standard junction boxes without using a separate firebox, ‘can’ or lighting fixture.” Id. ¶ 16. As described in the “Abstract” portion of the ‘266 Patent specification, the claimed lighting

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

system “provides a compact design that allows the combined casting, light source module, driver, and reflector to be installed in a standard junction box instead of a ‘can’ housing structure to reduce the overall cost of the lighting system while still complying with all building and safety code/regulations.” Patent at p.2.

### III. LEGAL STANDARD

Claim construction begins with an examination of the intrinsic evidence of record, which includes the patent claims,<sup>1</sup> the specification,<sup>2</sup> and, if in evidence, the prosecution history.<sup>3</sup> Phillips v. AWH Corp., 415 F.3d 1303, 1316-17 (Fed. Cir. 2005) (en banc).

<sup>1</sup> The first source courts turn to in order to define the scope of the invention is “the words of the claims themselves, both asserted and nonasserted.” Abbott Labs. v. Andrx Pharms., Inc., 452 F.3d 1331, 1336 (Fed. Cir. 2006) (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms” and “the context in which a term is used in the asserted claim can be highly instructive.” Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc). Claim language is generally interpreted consistently across different claims. Id.

<sup>2</sup> “The claims, of course, do not stand alone,” but instead “must be read in view of the specification, of which they are a part.” Phillips, 415 F.3d at 1315–17 (internal quotations omitted); see also Vitronics, 90 F.3d at 1582 (“[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term”). However, it is improper to read limitations from the written description into a claim. Tate Access Floors, Inc. v. Maxcess Techs. Inc., 222 F.3d 958, 966 (Fed. Cir. 2000) (citations omitted); see also Phillips, 415 F.3d at 1320 (quoting SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1340 (Fed. Cir. 2001)) (referring to reading a limitation from the written description into the claims as “one of the cardinal sins of patent law”). Conversely, “an interpretation [which excludes a preferred embodiment] is rarely, if ever, correct and would require highly persuasive evidentiary support.” Vitronics, 90 F.3d at 1583.

<sup>3</sup> The prosecution history “contains the complete record of all the proceedings before the Patent and Trademark Office, including any express representations made by the applicant regarding the scope of the claims.” Vitronics, 90 F.3d at 1582. “[B]ecause

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

Courts also may use extrinsic evidence, for example dictionaries, treatises, and expert or inventor testimony, to resolve ambiguities in the disputed claim terms, but “while extrinsic evidence can shed useful light on the relevant art ... it is less significant than the intrinsic record in determining the legally operative meaning of claim language.”<sup>4</sup> Phillips, 415 F.3d at 1317-18 (internal citations omitted) (quoting C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical extrinsic evidence, such as dictionaries, encyclopedias, and technical treatises, may similarly be consulted to help determine the meaning of claim terms.<sup>5</sup> Phillips, 415 F.3d 1322-23. All evidence – both intrinsic and extrinsic – should be viewed from the perspective of a person of ordinary skill in the relevant art at the time the invention was filed. Markman v. Westview Instruments Inc., 52 F.3d 967, 979-80 (Fed. Cir. 1995) (en banc), aff’d, 517 U.S. 370 (1996).

Generally, courts begin with a presumption that “claim terms are to be given their ordinary and customary meaning.” Aylus Networks, Inc. v. Apple Inc., 856 F.3d 1353, 1358 (Fed. Cir. 2017) (internal quotations omitted) (citing Aventis Pharm. Inc. v. Amino Chems. Ltd., 715 F.3d 1363, 1373 (Fed. Cir. 2013)). “Properly viewed, the ‘ordinary

---

the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.” Phillips, 415 F.3d at 1317. Despite this, the prosecution history “can often inform the meaning of the claim language by demonstrating how the inventor understood the invention.” Id.

<sup>4</sup> “The sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.” Phillips, 415 F.3d at 1324.

<sup>5</sup> In Phillips, the Federal Circuit cautioned that “heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.” Phillips, 415 F.3d at 1321 (holding that a court should not start with a dictionary to determine the plain meaning of a term, and only then turn to the specification in order to determine whether to narrow that meaning in light of the intrinsic evidence).

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent.” Phillips, 415 F.3d at 1321. “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” Id. at 1314.

The Federal Circuit recognizes two exceptions to the general rule that claim terms are given their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the patent intrinsic record: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” Thorner v. Sony Computer Entm’t Am. LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing Vitronics, 90 F.3d at 1580). To act as her own lexicographer, the patentee must “‘clearly set forth a definition of the disputed claim term’ other than its plain and ordinary meaning.” Id. (quoting CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002)); Helmsderfer v. Bobrick Washroom Equip., Inc., 527 F.3d 1379, 1381 (Fed. Cir. 2008) (patentee must “clearly express an intent” to depart from the plain and ordinary meaning). To effect a clear disavowal or disclaimer in the patent specification, the applicant must make clear “that the invention does not include a particular feature . . . even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question.” SciMed, 242 F.3d at 1341; see also Thorner, 669 F.3d at 1366. Similarly, during prosecution, a patent applicant can “make[ ] clear that the invention does not include a particular feature, or is clearly limited to a particular form of the invention.” Hill-Rom Servs., Inc. v. Stryker Corp., 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal quotations and citations omitted). If the plain language of the claim is to be narrowed, any disclaimer of a broader construction must be “clear and unmistakable.” Cordis Corp. v. Boston Scientific Corp., 561 F.3d 1319, 1329 (Fed. Cir. 2009); Home Diagnostics, Inc. v. Lifescan, Inc., 381 F.3d 1352, 1358 (Fed. Cir. 2004).

#### **IV. DISCUSSION**

As an initial matter, the Court observes that both parties offer expert testimony on how to construe ordinary, non-technical language in the ‘266 Patent. The Court observes that “[e]xperts may be examined to explain terms of art, and the state of the art, at any given time,’ but they cannot be used to prove ‘the proper or legal construction of any instrument or writing.’” Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841 (2015) (quoting Winans v. New York & Erie R. Co., 62 U.S. 88, 100 (1859)).



UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

Where appropriate, the Court references expert testimony that meaningfully explains technical terms or the state of the art. The Court otherwise gives no weight to expert testimony that merely offers an opinion on the proper construction of a claim.

**A. “Unified Casting”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
unified casting	all claims	A structure formed as a single-part of heat-conducting material—e.g., heat-conducting material is formed into a one-piece structure, rather than screwing together separate structures.	A structure formed from a single element or from multiple elements brought together to form the structure.

Claim 1 recites:

a **unified casting** with a heat conducting closed rear face, a heat conducting sidewall and an open front face wherein the heat conducting sidewall is joined to the heat conducting closed rear face at one end and defines the open front face of the **unified casting** at another end . . . and wherein the **unified casting** includes a plurality of elements positioned proximate to the open front face so as to align with corresponding tabs of a standard junction box . . .

Patent at 8:8–30 (emphasis added).

The parties’ dispute regarding this claim term is whether the unified casting can consist of more than one component. Both parties rely on language from the specification in support of their respective arguments. The specification states:

The casting 5 may be formed of metals, polymers, metal alloys, and/or other materials.

Although described as a casting 5, the casting 5 may be formed through other processes other than casting techniques. For example, the casting 5 may be formed through an extrusion process or formed through the welding of metal sheets to form a structure.

Patent at 3:16–17; 3:47–51.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

ELCO argues that the above specification language means that the unified casting may be formed of multiple elements. ELCO also relies on the Merriam-Webster Dictionary, which defines “unified” as “brought together as one.” Def. Opening at 12.

DMF argues that the specification language indicates that the unified casting is a one-piece structure made of the same heat-conducting material. Pl.’s Response at 11. DMF also finds support in the patent prosecution history wherein Danesh distinguished from the Pickard reference, which was “a multi-part structure” comprised of a “heat sink 198,” “driver housing 195,” and “main housing 180,” by explaining that the “unified casting” “presents a unified, single-part solution in which the unified casting plays a large role, namely as a one-piece housing for the driver, the light source module and the reflector, while also acting as a heat sink thereby eliminating any need for any additional heat sink piece.” Pl.’s Response at 11; ‘266 Patent File History at FH266PAT 0306.

The Court finds that ELCO’s proposed construction of the term “unified casting” is contrary to the intrinsic evidence. The claim language, written description, and patent prosecution history—as well as the very use of the word “casting”—demonstrate that the “unified casting” refers to a one-piece structure made from the same heat-conducting material. Indeed, the other techniques described in the ‘266 Patent for forming the unified casting (i.e., extrusion and welding) would all result in a one-piece structure made from the same material that cannot be separated. The Court is also unpersuaded by ELCO’s argument that the specification language stating that the casting “may be formed of metals, polymers, metal alloys, and/or other materials” means that a single casting can be made of different materials. Rather, this language, in the context of the ‘266 Patent, indicates that the unified casting can be made from one of many different types of heat-conducting material.

The Court acknowledges that the Merriam-Webster Dictionary defines “unified” as “brought together as one,” but disagrees with ELCO that the use of this word means that the casting itself is a structure made of different elements. Rather, in the context of the ‘266 Patent, the word “unified” indicates that the casting serves as both a heat sink and a housing for the light source module and driver. This interpretation is consistent with the file history of the ‘266 Patent wherein Danesh explained that the unified casting functions “as a one-piece housing for the driver, the light source module and the reflector, while also acting as a heat sink thereby eliminating any need for any additional heat sink piece.” Pl.’s Response at 11; ‘266 Patent File History at FH266PAT 0306. Indeed, in its



UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

supplemental brief, ELCO reverses course and argues that “the word ‘unified’ refers to the multi-functionality of the casting, not to its physical construction.” Def. Supp. at 6.

Having rejected ELCO’s proposed construction, the Court determines whether the term “unified casting” requires any further construction. Although DMF’s proposed construction is accurate, the Court observes that “merely rephrasing or paraphrasing the plain language of a claim by substituting synonyms does not represent genuine claim construction.” C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 863 (Fed. Cir. 2004). The Court finds that a typical juror would understand “unified casting” without assistance and declines to provide further clarification of this term.

For the reasons stated, no construction of “unified casting” is necessary.

**B. “Closed Rear Face”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
rear face	1–26	The unified casting’s “closed rear face” is a three-dimensional object that includes an external surface and internal surface and the claim language refers to the internal surface of the “closed rear face.”	Indefinite pursuant to 35 U.S.C. § 112.  Alternatively,  The exterior rear surface of the unified casting.
closed rear face	1–26, 28	The “closed rear face” may have small holes to accommodate wires or screws and may even have slightly larger holes.	A rear face that has no openings.

The claim term “closed rear face” appears in many of the claims of the ‘266 Patent, including Claim 1, which recites:

a unified casting with a heat conducting **closed rear face**, a heat conducting sidewall and an open front face . . . wherein the light source module and the driver are positioned inside the first cavity while being coupled to the heat conducting **closed rear face** of the unified casting such that the light source

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

module is closer to the **closed rear face** of the unified casting than the open front face of the unified casting . . .

Patent 8:8–26.

The parties dispute whether the term “closed rear face” refers only to the exterior surface of the rear portion of the unified casting and whether the “closed rear face” may have small openings. The Court first addresses whether the term “closed rear face” refers only to the exterior of the rear portion of the unified casting.

**i. Interior or Exterior Rear Surface**

ELCO argues that the term “rear face” should be construed to mean only the exterior rear surface of the unified casting because: (1) Figure 1 and Figure 3 of the ‘266 Patent identify the rear face as the exterior rear surface of the unified casting; (2) the Merriam-Webster Dictionary defines “face” to mean “a front, upper, or outer surface”; and (3) the claims refer to the exterior surface of the closed rear when describing the total height of the claimed invention and the function of the closed rear face in significantly dissipating heat. *Id.* at 15.

The Court finds that ELCO’s proposed construction is incompatible with the language of the claim, which recites that “the light source module and the driver are positioned inside the first cavity while being coupled to the heat conducting closed rear face of the unified casting . . .” Patent 8:21–24. The light source module cannot be both inside the first cavity and coupled to the exterior surface of the closed rear face. ELCO’s proposed construction also finds no support in the specification, which repeatedly refers to the interior surface of the closed rear face. *See, e.g.*, Patent 3:26–28 (“The closed rear face 14 allows the light source module 3 and the driver 4 to be securely mounted to the casting 5 . . .”). In fact, ELCO’s construction would exclude the preferred embodiments of the ‘266 Patent by requiring the light module to be attached to the exterior surface of the closed rear face. The Court declines to construe the meaning of “closed rear face” in such a way as to exclude the preferred embodiments of the invention.

Indeed, the Court previously rejected ELCO’s proposed construction of the term “closed rear face” in its order granting DMF’s motion for a preliminary injunction. Dkt. 147 at 11–12. In that order, the Court explained that “ELCO’s construction of the term ‘closed rear face’ to refer exclusively to the exterior surface of the rear of the casting is

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

CIVIL MINUTES - GENERAL

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

plainly inconsistent with how the term ‘closed rear face’ is used throughout the specification[,]” as well as the relevant claim language. Id. The Court is still persuaded that ELCO’s proposed construction finds no support in the ‘266 Patent and sees no reason to depart from its earlier conclusion.

Alternatively, ELCO, contends that if “rear face” were to refer to the entirety of rear portion of the unified casting, the term would be indefinite because a competitor would not be able to determine whether it is infringing the claimed invention. Def.’s Opening at 14. Specifically, ELCO references language in Claim 1 which provides “wherein the heat conducting sidewall has a first dimension between the heat conducting closed rear face and the open front face of less than 2 inches” and argues that when determining whether the “first dimension” of the sidewall is less than two inches, one must measure the sidewall from the exterior surface of the closed rear face to the open front face. Therefore, according to ELCO, allowing “closed rear face” to also refer to the interior surface of the rear portion of the casting when determining whether the light module is “closer to” the closed rear face than the open front face would render that term too indefinite. Id.

A claim term is indefinite if “[the] claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2124 (2014). The burden is on the defendant to prove indefiniteness by clear and convincing evidence. BASF Corp. v. Johnson Matthey Inc., 875 F.3d 1360, 1365 (Fed. Cir. 2017). The Court is not persuaded that the term “closed rear face” is indefinite merely because it can refer to the interior surface, the exterior surface, or the entirety of the closed rear face. The Court finds that the claim language provides enough context to allow a person of ordinary skill in the art to determine what part of the closed rear face is being referenced. For example, with respect to the claim language cited by ELCO in arguing that the term “closed rear face” is indefinite, the Court finds that the claim itself explains how to measure the length of the sidewall. Claim 1 recites:

a unified casting with a heat conducting closed rear face, a heat conducting sidewall and an open front face wherein **the heat conducting sidewall is joined to the heat conducting closed rear face** at one end and defines the open front face of the unified casting at another end, wherein the heat

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

conducting sidewall has a first dimension **between** the heat conducting closed rear face and the open front face of less than 2 inches . . .

Patent at 8:8–16 (emphasis added). Here, because the claim states that the sidewall is “joined to” the “closed rear face” and that the sidewall has a “first dimension between the heat conducting closed rear face and the open front face,” one would determine the length of the sidewall by measuring the distance from the “open front face” to where the sidewall is “joined to” the “closed rear face.” Although determining where the sidewall is “joined to” the “closed rear face” would depend on the shape of the casting, the Court is nonetheless persuaded that the claim language is sufficiently definite to allow a person of ordinary skill in the art to determine how to measure the sidewall.

Having rejected ELCO’s argument that the term “closed rear face” is indefinite as well as its proposed construction of that term, the Court determines whether the “closed rear face” requires any clarifying construction. Claim 1 recites a unified casting with an open cavity comprised of three parts: (1) a heat conducting closed rear face, (2) a heat conducting sidewall, and (3) an open front face. The delineation of three parts makes it clear that the “closed rear face” refers to the portion of the unified casting that is not the open front face or the sidewall—i.e., the rear part of the casting opposite the open front face. Accordingly, the Court finds that the term “closed rear face” does not require construction. The Court, however, is aware that the parties dispute whether the interior surface or the exterior surface of the “closed rear face” is referenced in the “closer to” limitation of Claim 1. The Court addresses this issue in its discussion of the term “closer to.”

**ii. Holes in the Closed Rear Face**

The parties also dispute whether the closed rear face may have any openings. ELCO argues that the closed rear face may not have any holes. In support of this construction, ELCO relies on various dictionary definitions of “closed”: “not open,” “covering an opening—having an opening that is covered,” and “being a complete self-contained system with nothing transferred in or out.” Def.’s Opening at 17. ELCO also argues that because Claim 10 requires a “first plurality of wires” that “passes through the heat conducting closed rear face,” an opening must be made in the closed rear face to meet that claim limitation. ELCO also points to the prosecution history wherein Danesh argued that various prior art references failed “to teach or suggest the claim limitation of

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

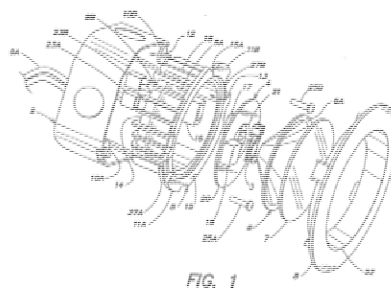
Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

a unified casting that includes a closed rear face (i.e. a rear face without any openings as shown in the primary reference, Benesohn).” Id. (citing Dkt. 69, Ex. 4 at 227).

DMF argues that the patent language clearly contemplates that the closed rear face would have small openings to accommodate wires and screws. First, DMF notes that many of the claims require wires to pass through the closed rear face. For example, Claim 10 states that a “first plurality of wires passes through the heat conducting closed rear face of the unified casting.” Patent at 9:24–26. Claim 21 includes “a plurality of wires coupled to the driver and passing through the heat conducting unified casting.” Id. at 10:59–60. Claim 29 states that “the plurality of wires passes through the closed rear face of the unified casting.” Id. at 12:56–57. Claims 4 and 18 also contemplate the closed rear face having holes for bolts and screws:

the light source module is coupled to the heat conducting closed rear face of the unitary casting using at least one of a resin, one or more clips, one or more bolts, one or more screws and one or more clamps.

Patent 8:55–58. Figure 1 of the specification also shows a pair of electrical wires extending from the closed rear face:



Patent at p.7. DMF also explains that ELCO’s reliance on the prosecution history is misplaced because Danesh made that statement in an attempt to distinguish the “closed rear face” from the closed rear face of Benesohn which has several large openings. ‘266 Patent File History at FH266PAT 0218-0219; FH266PAT 0417.

The Court is persuaded by DMF. The claim language itself requires the “closed rear face” to have holes that allow wires to pass through it and holes that accept screws and bolts to couple the light source module to the unified casting. In other words, there

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

must be holes in the closed rear face for the rest of the claim language to be satisfied. ELCO acknowledges this but argues that an “opening must be made in the closed rear face” to meet those claim limitations. ELCO appears to be drawing a distinction between holes that are made in the closed rear face versus holes that were presumably formed during the casting process. This distinction, however, is meaningless. The “closed rear face” in the patent plainly has some small openings to accommodate wires and screws, and nothing in the ‘266 Patent distinguishes between holes that were created during or after the casting process.

Although the Court has rejected ELCO’s proposed construction, the Court finds that this term also requires no construction. Something that is “closed” is not necessarily free of any openings or holes—for example, a screen door can be “closed” although the screen itself has many holes. A person of ordinary skill in the art would understand that the ordinary meaning of “closed” in the context of the ‘266 Patent to encompass a surface that has small holes to accommodate wires and screws.

For reasons stated, no construction is needed for the phrase “closed rear face.”

**C. “Rear Heat Conducting Portion”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
rear heat conducting portion	26–30	The rear of the heat conducting unified casting (i.e., the portion of the unified casting that forms the rear of the unified casting).	Indefinite pursuant to 35 U.S.C. § 112.  Alternatively,  The exterior rear surface of the unified casting.

The term “rear heat conducting portion” appears in Claims 26, 28, 29, and 30. Claim 26 recites:

a substantially heat conducting unified casting forming a casting cavity having a front face and a rear heat conducting portion and having dimensions to fit inside a standard-sized junction box . . .



UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

Patent at 12:11–13.

ELCO argues that the term “rear heat conducting portion” is too indefinite because it is unclear what a “portion” is—“[p]ortion” is an amorphous, non-descript, useless term as used in the ‘266 Patent.” Def.’s Opening at 16. ELCO also relies on dictionary definitions of “portion” to argue that none of those definitions—such as “an individual’s part or share of something”—would assist a person of ordinary skill in the art to determine what “rear heat conducting portion” means. *Id.* In the alternative, ELCO argues that “rear heat conducting portion” should be construed to mean the exterior rear surface of the unified casting so that the claims of the ‘266 Patent are construed consistently. *Id.* at 17.

DMF responds that the Court should reject ELCO’s proposed construction for the same reasons it should reject ELCO’s proposed construction of the term “closed rear face.” Pl.’s Response at 15. The Court agrees and finds that ELCO’s proposed construction fails because nothing in the claim language or specification limits the “rear heat conducting portion” to its exterior surface. The Court is also not persuaded by ELCO’s argument that the term is indefinite. Although ELCO contends that the word “portion” standing alone is meaningless, the Court observes that many words are meaningless when taken out of context. This is why “the context of the surrounding words of the claim must be considered in determining the ordinary and customary meaning of those terms.” *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003). Here, the “substantially heat conducting unified casting” is described as having two parts: (1) a front face, and (2) a rear heat conducting portion. Accordingly, the “rear heat conducting portion” of Claim 26, unlike the “closed rear face” of Claim 1, consists of the entire rear of the casting including the sides. The Court sees no reason why this term—when read in the context of the claim as well as the entire patent—would fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.

Accordingly, the Court finds that the term “rear heat conducting portion” is not indefinite and does not require construction.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No. 2:18-cv-07090-CAS-GJS

Date August 2, 2019

Title DMF, INC. V. AMP PLUS, INC. ET AL.

**E. “Closer To”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
closer to	1, 26	Measured along the shortest distances between the light source module and (1) the closed rear face and (2) the open front face.	As measured along the center axis, or a line parallel thereto, the distance from the center of the light source module toward the open front face to the point of intersection with the open front face plane, is less than the distance from the center of the light source module toward the closed rear face to the point of the intersection with the rear face. Where the light source is located on the center axis, the center axis is the line along which the measurements are taken. Where the light source is not located on the center axis, measurements are taken along a line parallel to the center axis. If the LED is not placed on the center axis, the proper measurements are made along a line parallel to the center axis (and the sidewalls) passing through the center of the LED. If, for some reason, the closed rear face of the casting were asymmetrical, such that the deepest point along the exterior surface of the closed rear face was not on the center axis, the second measurement is simply made from the LED along the center axis toward the closed rear face to the point on the axis that intersects with the parallel plane that passes through the deepest point of the exterior surface of the closed rear face.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

Claim 1 recites:

a unified casting . . . wherein the light source module and the driver are positioned inside the first cavity while being coupled to the heat conducting closed rear face of the unified casting such that the light source module is **closer to** the closed rear face of the unified casting than the open front face of the unified casting . . .

Patent at 8:8–26 (emphasis added). At the core of the dispute between the parties is whether the distance between the light source module and the closed rear face should be measured from the exterior surface or the interior surface of the closed rear face. The Court previously addressed this issue when ruling on DMF’s motion for preliminary injunction and found that the distance should be measured between the light source module and the interior surface of the closed rear face. Dkt. 147 at 12 (explaining that the relevant limitation of Claim 1 “plainly refers to the interior surface of the closed rear face because that is where the light module is attached”).

ELCO contends that this construction is inconsistent with the purpose of this limitation, which is to require the light source module to be well-recessed inside a junction box. Def.’s Opening at 24. ELCO points to the prosecution history wherein Danesh distinguished his device from prior art by adding the “closer to” limitation to clarify that when the unified casting is placed inside a standard junction box, the LED module itself would be well-recessed inside the standard junction box. *Id.* at 24. The Court is not persuaded that the exterior surface of the closed rear face is the relevant reference point in determining whether the light source module is “well-recessed” inside a junction box. As DMF explains, “[i]f the light source module is closer to the closed rear face, then it is well-recessed; if the light source module is closer to the open front face, then it is not.” Pl.’s Response at 22. Because the distance between the light source module and the interior surface of the closed rear face would also indicate how well-recessed the light source module is in the junction box, the Court finds that the prosecution history does not support ELCO’s proposed construction of “closer to.”

Accordingly, the Court finds that ELCO’s proposed construction of “closer to” is inconsistent with the claim language and specification of the ’266 Patent. The Court, however, also finds that the term “closer to” does not require construction. As DMF

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

aptly explains, “to determine whether you are *closer to* California or New York, you would measure to the *closest* point of each state (not to the furthest points of each state)”:



Pl.’s Response at 23. The Court agrees that when measuring how close one object is to another object, one would measure the length of the gap between those objects rather than the distance between the outer edges of those objects. Accordingly, the plain meaning of “closer to” in the claim language requires a comparison of the length of the gap between the light source module and the interior surface of the closed rear face with the length of the gap between the light source module and the open front face. The term “closer to” itself provides for this method of comparing distances and does not require further construction.

**D. “Open Front Face”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
open front face	1–25	The portion of the exterior surface of the unified casting’s front end face near the unified casting’s sidewall.	The plane running across and parallel to the front end of the casting that includes, in that plane, the front end of the casting and the opening, or aperture, defined by the front end, and extends to the

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

			outer edge of the front end in all directions.
--	--	--	--

The parties dispute whether the “open front face” refers only to the front rim of the unified casting or whether it encompasses both the rim and the opening created by the rim. This dispute is related to the parties’ dispute about how to determine whether “the light source module is closer to the closed rear face of the unified casting than the open front face of the unified casting . . .” Patent at 8:24–26. DMF represents that construction of this term would not resolve an infringement dispute because when measuring the light source module from the interior surface of the closed rear face, infringement is established regardless of how the term “open front face” is construed. Dkt. 247 at 9. At oral argument, ELCO contended that construction of this term is necessary so that ELCO may determine whether its designs for other lighting products, which are not at issue in this case, infringe the ‘266 Patent.

It appears that construction of the term “open front face” would not resolve an actual infringement dispute in this case because the “closer to” limitation exists in the allegedly infringing products regardless of whether the light source module is measured from the rim of the open front face or the plane that runs across the open front face. The Court declines to provide an advisory opinion on the construction of the term “open front face” so that ELCO may determine whether the “closer to” limitation exists in a hypothetical product.

Accordingly, the Court finds that the term “open front face” does not require construction.

**F. “Center Axis of the Unified Casting”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
center axis of the unified casting	1	An imaginary line running through the geometric center and inside of the unified casting that is surrounded by the sidewall of the unified casting. The geometric center is located at the average position of all points of the unified casting, which may or may not	The axis running through the center of the rear face and parallel to the sidewall.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

		be an equal distance from all of the points (i.e., the unified casting may not be fully symmetric).	
--	--	---	--

The parties' dispute about how to construe the phrase "center axis of the unified casting" stems from ELCO's proposed construction of the phrase "closer to." The Court finds that construction of the phrase "center axis of the unified casting" is not necessary in light of the Court's analysis of the term "closer to."

**G. "Significantly Dissipates"**

Term	Claims	Plaintiff's Construction	Defendants' Construction
significantly dissipates	1, 26	The heat conducting closed rear face and the heat conducting sidewall of the unified casting significantly dissipate heat generated by the light source module during operation of the light source module without requiring an additional heat sink (i.e., an additional heat sink may be present, but is not required).	Indefinite pursuant to 35 U.S.C. § 112;  Alternatively,  Transfers or disperses into the outside environment at a measurably great rate.

The term "significantly dissipates" appears in several claims, including Claim 1, which recites:

wherein the heat conducting closed rear face and the heat conducting sidewall of the unified casting **significantly dissipate heat** generated by the light source module during operation of the light source module.

Patent at 8:41–44. ELCO contends that the term is indefinite because the '266 Patent "sheds no light whatsoever on how to determine the rate at which heat generated by the light source module must be dissipated by the unified casting to satisfy the 'significantly dissipates' limitation" in the claims. Def.'s Opening at 7. ELCO's lighting design expert opines that it is impossible for a person of ordinary skill in the art to determine which portion of the casting dissipates heat at a significant rate and that a person of ordinary skill in the art would not have the equipment necessary to determine the heat dissipation



UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

rate of the casting. Dkt. 242-1, Declaration of Eric Bretschneider (“Bretschneider Decl.”) ¶¶ 53, 49.

DMF responds that the intrinsic evidence demonstrates that the “unified casting” functions as the heat sink of the lighting system and that a person of ordinary skill in the art would thus understand how to conduct thermal testing of the unified casting to determine whether it significantly dissipated heat generated by the light module during operation. DMF Supp. at 5–10. DMF also notes that Danesh added the “significantly dissipates” limitation to the claim language at the suggestion of two patent office examiners. Id. at 6 (citing ‘266 Patent File History at FH226PAT 0305-66; 1051).

DMF’s lighting expert, Benya, also provides a detailed discussion of the objective criteria used for designing heat sinks for LED devices so that they significantly dissipate heat generated by the LED during operation. Dkt. 241, Reply Declaration of James Benya (“Benya Reply Decl.”) ¶¶ 12–41, 45–48. According to Benya, “[a] basic skill required in designing recessed LED lighting systems for residential and commercial buildings is managing heat generated by an LED light source in operation so that the LED’s junction temperature remains below a certain temperature threshold based on the LED’s datasheet specifications and the desired parameters for the lighting system, such as the projected life span, lumen maintenance and color maintenance of the lighting system.” Id. ¶ 13. For example, Benya explains that the XLamp B1512N LED manufactured by CREE provides information about the LED’s operation at different temperatures and indicates where exactly on the LED device the temperature should be measured. Id. ¶ 31. Benya explains that a lighting engineer would rely on the various guidelines provided by CREE to design and test a recessed lighting system, including its heat sink, such that it keeps the LED’s temperature below its temperature threshold. Id. ¶¶ 31–41.

ELCO fails to prove by clear and convincing evidence that the term “significantly dissipates” is indefinite in the context of the claims of the ‘266 Patent. The ‘266 Patent file history clarifies that the “significantly dissipates” heat limitation was added to indicate that the unified casting functions as the heat sink of the claimed lighting system. See ‘266 Patent File History at FH266PAT0305-06 (the dimensions of the unified casting gives it “sufficient bulk to act as a heat sink by itself and without requiring a separate heat sink structure. . . . Applicant’s claim 1 presents a unified, single-part solution in which the unified casting plays a large role, namely as a one-piece housing for the driver, the light source module and the reflector, while also acting as a heat sink thereby

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

eliminating the need for any additional heat sink piece.”); *id.* at FH266PAT 1054 (“Inventor Danesh [ ] explained to the Examiners that one salient feature of the product is the heat conducting unified casting that significantly dissipates heat generated by the LED module during operation. The Examiners focused their attention during this discussion primarily on the newly-introduced Woo reference; among other things, it was noted and agreed by all participants that Woo’s housing is not heat conducting and cannot significantly dissipate heat generated by light sources during operation.”); *id.* (“Accordingly, the Examiners agreed that a heat conducting unified casting that significantly dissipates heat generated by an LED module during operation is a feature that distinguishes over both Woo and Benesohn.”). Accordingly, a person of ordinary skill in the art would understand that the claimed “unified casting” functions as the heat sink for the claimed lighting system and must therefore dissipate sufficient heat from the light source module such that the desired temperature threshold of the light source module is met.

ELCO’s expert, Bretschneider, does not discuss or consider the ‘266 Patent file history, which provides important information about how to understand the term “significantly dissipates heat” in the context of the ‘266 Patent. Bretschneider’s position that the ‘266 Patent should have supplied a specific rate for heat dissipation misses the point of why the “significantly dissipates” limitation exists—namely to indicate that the unified casting serves as the heat sink for the lighting system and must therefore dissipate enough heat so that a separate heat sink is not necessary. Given the variety of light source modules and parameters for lighting systems, it appears practical for the ‘266 Patent to not specify an exact rate by which the heat generated by the light source module must be dissipated by the unified casting. See *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 65–66 (1923) (a patent claim requiring a paper-making machine wire to be maintained at a “substantial elevation” not indefinite where “[i]t was difficult for [the inventor] to be more definite, due to the varying conditions of speed and stock existing in the operations of Fourdrinier machines and the necessary variation in the pitch to be used to accomplish the purpose of his invention”).<sup>6</sup>

---

<sup>6</sup> Bretschneider also contends that heat “can only dissipate into the environment from the surface of the heat sink via convection and radiation” and therefore, once the claimed lighting device is installed in a junction box, “it is impossible for the casting itself to dissipate heat—as it would not interact with the ambient environment.”

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

The Court further observes that “numerical precision is [not] required when using [] terms of degree. All that is required is some standard for measuring the term of degree.” Exmark Mfg. Co. v. Briggs & Stratton Power Prods., 879 F.3d 1332, 1346 (Fed. Cir. 2018). Here, one skilled in the art would understand that to “significantly dissipate” heat, the unified casting must serve as the heat sink and manage the heat released by the light source module. One skilled in the art would thus understand that a lighting system that requires a separate heat sink to manage the heat released by the light source module would not satisfy the “significantly dissipates” limitation.

Accordingly, the Court finds that the “significantly dissipates” limitation “viewed in light of the specification and prosecution history, inform[s] those skilled in the art about the scope of the invention with reasonable certainty,” Nautilus, 134 S. Ct. at 2129, and is therefore not indefinite. The Court construes “significantly dissipates” to mean “dissipates sufficient heat generated by the light source module during operation of the light source module such that an additional heat sink is not required.”

**H. “Substantially Heat Conducting”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
substantially heat conducting	26	The unified casting is designed to have the level of thermal conductivity value expected for heat sinks.	Indefinite pursuant to 35 U.S.C. § 112;  Alternatively,

Bretschneider Decl. ¶ 51. Benya responds that the relevant heat dissipation at issue here is not the transfer of heat from the casting as a whole but rather the transfer of heat away from the LED so that heat does not accumulate at the LED and raise the LED’s junction temperature beyond its operating point. Benya Reply Decl. ¶ 18. Benya then explains that the unified casting dissipates heat from the light source module by thermal conduction because, as a bulky heat sink, it has the thermal capacity to absorb, contain, and distribute the heat from the light source for further transfer into the surrounding area. Id. The Court finds that Benya’s understanding of what the term “dissipates” means is consistent with the claim language, which requires the unified casting itself to “significantly dissipate heat generated by the light source module.” Patent at 8:41–44.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

			Conducts heat at a measurably high rate.
--	--	--	--

Claim 26 recites:

a substantially heat conducting casting forming a casting cavity . . . wherein the substantially heat conducting unified casting significantly dissipates heat generated by the light source module during operation of the light source module.

Patent at 12:11–31.

ELCO also contends that the term “substantially heat conducting” is indefinite because the ‘266 Patent fails to quantify how much of the heat generated by the light source module must be conducted by the unified casting to meet this claim limitation. Def.’s Opening at 10. The Court finds that ELCO’s indefiniteness challenge fails for the same reason it failed with respect to the term “significantly dissipates.” As noted above, Danesh added this term to the claim language at the suggestion of the patent examiners to communicate that the unified casting serves as a heat sink for the claimed lighting system. The Court is persuaded by Benya that a person of ordinary skill in the art would understand the term “substantially heat conducting” to mean that the unified casting has the substantial thermal conductivity value expected for a heat sink. A person of ordinary skill in the art would not need to know exactly how much heat is conducted by the unified casting to determine whether the unified casting conducts enough heat to function as the heat sink of the lighting system.

The Court thus finds that the term “substantially heat conducting” is not indefinite and construes “substantially heat conducting” to mean “having the level of thermal conductivity value expected for heat sinks.”

**I. “Standard Junction Box”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
standard junction box	1	A shell or enclosure having an industry-specified size (e.g., trade size 4/0 under NEC and UL industry	No construction necessary.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

		standards) for accommodating wire splices to building main power (e.g., 120 VAC or 277 VAC) inside the junction box and separating them from other items inside a ceiling or crawl space (e.g., insulation).	
--	--	--	--

Claim 1 recites:

a unified casting . . . wherein the unified casting includes a plurality of elements positioned proximate to the open front face so as to align with corresponding tabs of a standard junction box and thereby facilitate holding the unified casting up against the standard junction box when the unified casting is installed in the standard junction box . . .

Patent at 8:8–33.

The parties disagree on whether the phrase “standard junction box” is limited to junction boxes used in building and commercial buildings that conform to industry specifications. This dispute has two components: (1) whether the word “standard” is meant to limit the claim to junction boxes having an industry-specified size; and (2) whether the junction box must perform the function of accommodating wire splices to building main power. The Court addresses the two issues separately.

**i. Industry-Specified Size**

ELCO contends that “[a]nyone who has walked the electrical aisle of their local Home Depot or Lowe’s hardware store is familiar with standard junction boxes,” and that “[t]here is no need to construe this common term[.]” Def. Response at 2. ELCO also objects to DMF’s attempt to “limit the plain language of a standard junction box to one that [ ] indicates a certain size[.]” *Id.* The premise of ELCO’s argument appears to be flawed because DMF’s proposed construction does not limit the phrase “standard junction box” to just one size; rather, DMF only provides an example of one industry-specified size—trade size 4/0 under NEC and UL industry standards.

DMF’s proposed construction relies on the specification which explains that junction box 2 “may be pursuant to popular industry specifications for junctions” and provides example dimensions of “a length of 3 ½ inches, a width of 3 ½ inches and a

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

depth of 1 ½ inches.” Patent 3:7–9. DMF also argues that Danesh distinguished the claimed “standard junction box” from the “junction box 30” of no specified size in the Dabiet reference. Pl.’s Opening at 8–9.

The Court finds that an ordinary juror would understand that, in the context of the ‘266 Patent, the term “standard” means “industry-specified.” The Court thus finds that this term does not require a clarifying construction.

**ii. Building Main Power**

DMF offers the testimony of its expert, Benya, who explains that a person skilled in the art of designing recessed lighting devices for residential and commercial buildings would understand that a junction box serves the purpose of separating wiring splices to building main voltage from the surrounding ceiling or crawl space. Dkt. 238, Declaration of James Benya (“Benya Decl.”) ¶ 23. DMF also draws its proposed construction from the specification which explains that junction box 2 in FIG. 1 “may receive electrical wires 9A from an electrical system (e.g., 120 VAC or 277 VAC) within a building or structure in which the recessed lighting system 1 is installed.” Patent at 2:33–36. DMF also relies on the ‘266 Patent file history wherein Danesh explained that in his “single housing solution . . . building wiring carrying the AC ‘mains’ voltage may be coupled to the driver inside the unified casting via wire nuts or connectors inside the junction box[.]” ‘266 Patent File History at FH266PAT 1054–56; Benya Decl. ¶ 23.

ELCO argues that nothing in the claim or specification provides that the wires entering the junction box must come from “building main power” and argues that the very language DMF relies on from the specification only refers to wires from “an electrical system . . . within a building.” Def.’s Response at 4. ELCO does not explain, however, why it believes an “electrical system within a building” is distinct from “building main power.” ELCO also argues that DMF’s proposed construction is not supported by the specification because the specification states that junction box 2 “*may* receive electrical wires 9A from an electrical system . . . within a building or structure.” Patent at 2:33–36 (emphasis added).

The Court agrees that the specification standing alone is insufficient to limit the type of wiring housed in a “standard junction box.” However, the Court observes that “[t]he inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation.” Phillips, 415



UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

F.3d at 1313. This “starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” Id. A “person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” Id.

Here, the ‘266 Patent explains that the claimed recessed lighting system “provides a more compact and cost effective design while complying with all building and safety codes/regulations.” Patent at p.2. In the ‘266 Patent file history, Danesh distinguished the claimed recessed lighting system from prior art that did not consider building codes or fire safety standards. ‘266 Patent File History at FH266PAT 1060. Thus, a person of ordinary skill in the art would understand that a “standard junction box” in the context of the ‘266 Patent is a junction box used in residential and commercial buildings. The Court is persuaded by Benya who explains that a person with experience designing recessed lighting devices for residential and commercial buildings would understand that a “standard junction box” is “a basic wiring system element and safety device required by building codes to isolate splicing together of lighting fixture wires to building main voltage.” Benya Decl. ¶ 23. The Court also observes that ELCO’s own lighting expert explains that “a junction box installed in the ceiling provides a location for connection to electrical mains and provides the physical mounting mechanism for a ceiling mounted light fixture.” Bretschneider Decl. ¶ 26.

The Court is thus persuaded that DMF’s proposed construction reflects how a person of ordinary skill in the art would understand the term “standard junction box” in the context of the ‘266 Patent. The Court, however, finds that the examples provided by DMF in its proposed construction may mislead the jury. Accordingly, the Court construes “junction box” to mean “a shell or enclosure for accommodating wire splices to building main power and separating them from other items inside a ceiling or crawl space.”

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

**J. “Driver”**

Term	Claims	Plaintiff’s Construction	Defendants’ Construction
driver	1	A device that receives building main voltage (e.g., 120 VAC or 277 VAC) and includes an electronic device that at least supplies and/or regulates electrical energy to the light source module.	No construction necessary.

Claim 1 recites:

a driver for powering the light source module to emit light, the driver including an electronic device to at least one of supply and regulate electrical energy to the light source module

Patent at 8:4–7.

The instant dispute mirrors the dispute about whether “standard junction box” refers to junction boxes used in connecting lighting fixtures to building main power. DMF’s expert, Benya, explains that because LED lights may require low-voltage power, they cannot be powered directly by building main voltage and therefore require a driver to convert building main voltage to the voltage required by the LED light. Pl.’s Opening at 10 (citing Benya Decl. ¶ 35). Therefore, according to DMF, “‘drivers’ in the context of recessed LED lights used in residential or commercial buildings are understood to be devices that receive building main voltage and convert that into the voltage required by the LED light.” *Id.* In making this argument, DMF also relies on the specification which states that “driver 4 receives an input current from the electrical system of the building or structure in which the recessed lighting system 1 is installed and drops the voltage to an acceptable level for the light source module 3 (e.g., from 120V-240V AC to 36v-48v DC).” Patent at 4:38–43. The ‘266 Patent file history also provides that the invention is directed to “a single-housing solution provided by Inventor Danesh’s innovative assembly [in which] building wire carrying AC ‘mains’ voltage may be coupled to the driver inside the unified casting via wire nuts or connectors inside the junction box[.]” ‘266 Patent File History at FH266PAT 1056.

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

ELCO responds that the term “driver” requires no construction because the term is sufficiently defined by the claims themselves. Def.’s Response at 6. ELCO further argues that nothing in the ‘266 Patent explicitly provides that the driver must accept only AC power. ELCO also attaches several technical guides which describe LED drivers and do not indicate that LED drivers may only be connected to building main voltage. See Dkt. 243, Exs. 2–3.

For reasons stated in the Court’s analysis for the term “standard junction box,” the Court agrees with DMF that a person of ordinary skill in the art would understand that a driver in the context of the ‘266 Patent is intended to serve the function of supplying and regulating electrical energy from building main power to the light source module. The Court is not persuaded by ELCO’s extrinsic evidence because those technical dictionaries refer to many different types of lighting products and do not shed light on how a person of ordinary skill in the art would understand what a “driver” is in the context of the ‘266 Patent which is directed at recessed lighting systems installed in buildings.

The Court, however, is not necessarily persuaded that the term requires any clarifying construction. The abstract and specification of the ‘266 Patent indicate that the patent is directed at a recessed lighting system to be installed in buildings and the claim language itself adequately defines a driver as an electronic device that “at least one of supplie[s] and regulate[s] electrical energy to the light source module[.]” Patent 8:5–7. Thus, it appears that an ordinary juror would understand that the claimed driver supplies and/or regulates electrical energy from building main power to the light source module.

Accordingly, the Court finds that the term “driver” does not require construction.

**V. CONCLUSION**

In accordance with the foregoing, the Court concludes that:

“unified casting” does not require construction;

“closed rear face” is not indefinite and does not require construction;

“rear heat conducting portion” is not indefinite and does not require construction;

“closer to” does not require construction;

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA

**CIVIL MINUTES - GENERAL**

Case No.	2:18-cv-07090-CAS-GJS	Date	August 2, 2019
Title	DMF, INC. V. AMP PLUS, INC. ET AL.		

“open front face” does not require construction;

“center axis of the unified casting” does not require construction;

“significantly dissipates” is not indefinite; the Court construes “significantly dissipates” to mean “dissipates enough heat generated by the light source module during operation of the light source module such that an additional heat sink is not required.”

“substantially heat conducting” is not indefinite; the Court construes “substantially heat conducting” to mean “having the level of thermal conductivity value expected for heat sinks”;

the term “standard” does not require construction; the Court construes “junction box” to mean “a shell or enclosure for accommodating wire splices to building main power and separating them from other items inside a ceiling or crawl space”;

“driver” does not require construction.

IT IS SO ORDERED.

Initials of  
Preparer

\_\_\_\_\_  
ef  
\_\_\_\_\_